

INDUSTRY STAKEHOLDER MEETING RECORD

INDUSTRY GROUP: US Army Corps of Engineers, Wilmington District

DATE: July 1, 2011

LOCATION: Conducted by phone

PARTICIPANTS: USACE Maritime Strategy Team
Greg Williams Chris Mack

The Maritime Strategy team, represented by Chris Mack, conducted a telephone interview with Greg Williams of the US Army Corps of Engineers (USACE), Wilmington District on July 1, 2011. The purpose of the conversation was to obtain USACE perspective and input on various waterside access, dredging, and environmental issues related to Cape Fear and channel into Morehead City.

Dredging

What dredging challenges exist along Cape Fear River to Wilmington? Through Beaufort Inlet to Morehead City?

- Funding is the biggest challenge! USACE SAW is not getting enough funding for adequate maintenance of navigation channels and harbors.
- Based on some indicators, the Port of Wilmington (POW) does not rank high on National priorities for funding of deeper draft ports in anticipation of the Panamax class vessels.
- Wilmington is not a huge container port, which prevents them from competing with others like Charleston and Savannah. Volume of TEUs is the name of the game.
- POW capacity is based more on bulk cargo. The ~25 miles sail distance up the port makes Wilmington less competitive. This is why the NCIT alternative was so attractive (i.e., it would reduce the sail distance & time).
- The military uses are one of the predominant factors supporting current investments in nominal maintenance dredging at MHC and POW. Strategically, the military (MOTSU) Military Ocean Terminal Sunny Point is one of the reasons the POW is currently maintained.
- The priority to keep NC ports open does not mean they get funds to maintain it to authorized depths.
- The State of NC can support the maintenance dredging, but they do not have sufficient funds either at the moment.
- Doubling the length of the channel to get to the deeper depths offshore is a challenge (i.e., engineering, costs, & environmental). Deeper means wider footprint (i.e., slopes lay back). Environmental impacts include adjacent shoals and bird islands. There is rock offshore...Bald Head alignment moved because of it.

What are plans to maintain Cape Fear channel to authorized width?

- Getting some funds to maintain navigation, but not for all the maintenance material that shoals.

- Just finished deepening in 2001-2002. Had great support for this from the Federal and State government. There have been questions if this increased costs to maintain.

What and where are existing permitted dredge material disposal sites to support maintenance dredging along Cape Fear? What and where are future disposal sites? Are there options for beneficial use?

- For mid-river upstream, Eagle Island CDF is used. That is filling up quickly. Getting close to completing Dredged Material Management Plan that addresses this issue.
- Plenty of capacity offshore; sail distance of ~28 miles offshore can be a cost factor for some projects.
- Beneficial Use: good news is sediments contain no significant amount of contaminants. In the past, beneficial use ideas included use for agricultural mix, top soil, etc. If someone had economic use for it, USACE would be very open to supporting this type of beneficial use. Potential is there, market is not. Pilot study would have to be done. Salt content might be too high. Very sloppy stuff, but does have some good material. However, the good material is used at the CDF for levee maintenance.
- Looked at engineering and cost to clean it out and dump at ODMDS...report is about 85% complete. Funding to finish the report was cut. Might be good timing to revisit this report and complete it.
- Mitigation cost for expansion of CDF (such as reclaiming cell 4) or new ones are often prohibitive (i.e., wetland impacts).
- Ideas have been discussed about using cell 4 for storage of good material.
- Higher fuel costs now may make this CDF more viable now (i.e., cell 4 option).

What dredging alternatives are under evaluation by USACE at NC ports? Cape Fear to Wilmington? Beaufort Inlet?

- The NCIT study authority looked at more than just the NCIT. USACE has reshaped this study now to look at other areas identified to be chronic areas of concern. Now, deemphasizing focus on NCIT and refocusing on three chronic problem areas: 1) channel by Bald Head...do we need to look at channel realignment to address shoaling problems, 2) turn at Battery Island is very difficult turn for ships to navigate especially for some of the ships calling now. What are the options: widen turn and/or realign. If you go deeper, additional widening to accommodate side slopes would have to be evaluated, and 3) expanding the anchorage basin and putting in a turning basin. There are plans to look at these three issues in the revised Wilmington Harbor study.
- DMMP for MHC harbor is currently being developed. Similar problems at MHC exist (i.e., Shackleford Banks shoaling, disposal options, and costs).
- Morehead is predominantly break-bulk cargo. It has a short sail distance to the inlet.
- Had not been approached with offshore berth idea. Cost prohibitive especially with vulnerability to hurricanes.
- Have not heard of any proposals at Oregon Inlet. Challenges at Oregon Inlet: Can only keep open 25% of time now. Can only keep it open in the summer months (width and depth...tremendous active shoaling...all they can do to keep it dredged to 12 feet). Its one of the most active inlets...if left natural, would migrate south. Dredging is done now using side casting or bypassing to the south. 12 years ago, proposed mile long jetties, which got rejected by environmental groups...too many impacts. Primarily recreational use. Small commercial fisheries group in Manteo. Use to be used by long liners and shrimpers.

What are the estimated costs for dredging for existing and alternatives?

- Costs are very volatile. Much of the summary cost information (i.e., IWR dredge cost reports) is really budget cost (not actual). In most cases, budgeted projects did not get fully funded and smaller phases were implemented (i.e., lower cost projects). These actual costs are not summarized as well as the budgeted costs. Smaller dredging volumes tend to have higher unit costs. Because of funding shortfalls, projects had to be phased to smaller ones which caused prices to go up.

What is the permitting status of potential PCS terminal expansion at Morehead City, which would require new wharf and dredging along Calico Creek – including removal of fill at south side of Marsh Island to maintain channel width and access to the yacht basin?

- Best to contact Regulatory (i.e., Field Office Chief, Dale Beeter. 910.251.4631). It is possible this may fall in jurisdiction of Washington field office.

What are average annual maintenance volumes, disposal sites, and costs at Cape Fear and at Beaufort?

- See annual reports. Caution though...when looking at quantities, might be estimates. What was actually dredged may not be what was “needed”. Using “removal of speed bump” approach to maintenance due to funding shortfalls. Can’t maintain full depth and width. Dealing with hot spots mostly or chronic areas.

Environment**What are the environmental impacts and concerns dredging along Cape Fear? Beaufort Inlet?**

- Some archaeological issues at Battery Island.
- Queen Ann’s Revenge at MHC...have to be careful there.
- Morehead has a pocket of contaminated material, but nothing that has prohibited current disposal practices.

Are there any known issues with contaminated sediments in existing/proposed dredge areas? What are habitat impacts?

- Contaminated sediments are not a big issue at the moment.

What dynamic studies have been done to evaluate impacts of dredging on nearby land masses? What approaches are in place or proposed to control shoaling / erosion at Cape Fear?

- Doing modeling of Wilmington Harbor project using ADCIRC and STWAVE (modeler: Layla Kashlan).

How would the proposed Cape Fear dredging impact the aquifer? How could this be mitigated?

- Past claims said it breached the Castle Hayne aquifer. The State geological survey did an analysis and said the claim is not valid. River bottom already interacted with aquifer. Reports are available.

What are storm surge concerns at Cape Fear? At Beaufort Inlet?

- NC has a recent history with increased tropical storm and hurricane activity impacting its coast.

Navigation Channel

What are issues related to S Turn at Cape Fear Inlet?

- Previous discussions have been conducted about placing jettys there. This would provide quicker sail times to deeper water. Won't be supported well by environment agencies and groups.

Would USACE consider reopening of "New Inlet" to Cape Fear River? What issues would need to be addressed?

- Would have to stabilize the inlet.
- Would have to dredge to tie in Cape Fear river (i.e., environmental impacts).
- Could increase erosion at Bald Head.
- Potential Frying Pan shoal impacts.

East Coast Channel and Dredging Projects

What is the status of various proposed channel and dredging projects on the East Coast? Charleston, Savannah, JAXPort?

- Charleston is conducting a Post 45 Feasibility Study – Wilmington District is doing the geotechnical analysis for this study.

What is status of the proposed study to assess East Coast ports' ability to handle neo-Panamax vessels and to examine key variables driving port choice following Panama Canal expansion?

- Which study?
- USACE IWR paper, The Implications of Panama Canal Expansion to U.S. Ports and Coastal Navigation Economic Analysis (<http://www.iwr.usace.army.mil/docs/iwrreports/WhitePaperPanamaCanal.pdf>)

Additional Data and Input

What data is available and which agencies have the best available data of the following: bathymetry (i.e., hydrographic surveys, soundings, depths, etc.)?

- Navigation folks have placed DGNs and related data online.

topography of adjacent existing and proposed port facilities?

- Try NC state and county GIS agencies and sources.

authorized navigation channel boundaries?

- Navigation folks have placed DGNs and related data online.

What other information should we consider in our analysis?

- POCs for additional information:
Bob Keistler – PM for Wilmington Harbor, 910.251.4709
Mitch Hall – Geotechnical, 910.251.4742
John Caldwell - Cost engineer, 910.251.4586
Frank Reynolds – Economist (retires in a month), 910.251.4773

Maritime Strategy Team action items resulting from the discussion include:

1. ~~Contact USACE Regulatory branch (i.e., Field Office Chief, Dale Beeter, 910.251.4631) for permit status of proposed PCS expansion at Morehead City. [No longer necessary in light of recent developments in Morehead City and issuance of Governor's Executive Order 99.]~~
2. Review USACE annual reports for information on maintenance dredging costs and volumes at Cape Fear and Beaufort Inlet.
3. Obtain and review report by state geological survey regarding Castle Hayne aquifer.
4. Solicit additional information from other USACE Districts regarding status of potential dredging at Savannah and for Jasper Terminal.
5. Verify that latest bathymetry and navigation channel boundary information (as available online from USACE Navigation) is incorporated into GIS.
6. Contact additional USACE staff as suggested by Greg Williams.